

There is no objection to any citizen choosing his own healing-art practitioner, but it is supposedly a primary obligation of the State to license, as healing-art practitioners—no matter to what so-called school belonging—only such citizens who have had adequate training and possess knowledge that is not a travesty on modern-day science and civilization.

It is an evidence of the chaotic condition of our present period that legislation is thus seriously proposed which is not only in conflict with the fundamental civic rights of citizens, but which is a distinct step backward from the scientific knowledge which the world today possesses.

FORTHCOMING STATE ELECTION—HOW COMPONENT COUNTY SOCIETIES SHOULD ORGANIZE

Plan of the Los Angeles County Medical Association.—On page 138 of the August CALIFORNIA AND WESTERN MEDICINE will be found a brief article, from the "Bulletin" of the Los Angeles County Medical Association, outlining the manner in which that component county society proposed to keep in touch with legislators and prospective legislation having to do with the public health. What the Los Angeles Association is doing along this line should be likewise done by every other county society in California; and because of the importance of well-planned and united action, the officers and members of each county unit in the State are urgently requested to organize in a manner similar to that described in the article referred to.

For there are probably few things one can do, more meaningless or inconsistent than to indulge in criticism of noxious laws inimical to the standards of public health and scientific medicine when those who make such criticisms fail in their own individual civic professional obligations, through almost complete inaction at the elections of legislators and at the voting upon initiative measures.

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Effective Organization Is Not a Complicated Problem.—It is such a comparatively simple matter to make the influence of members of the medical profession felt during legislative campaigns if a system such as that which is in operation in the Los Angeles and several other county societies in California is put into operation.

The article referred to is worthy of several readings. It is to be hoped, therefore, that at the first meeting of every county society, after this issue of CALIFORNIA AND WESTERN MEDICINE reaches its readers, a report will be made to the members on the status of organization work in their respective districts. If the elected officers of a county unit are laggard or indifferent to their responsibilities in this matter, individual members who wish to do their part should feel free to form a committee, either voluntary or as an adjunct of the Public Health League, so that adequate steps may be taken to contact legislative candidates of their district, to learn the reactions of these

legislative and other candidates to public health work; and to carry on an educational campaign of patients, friends, and fellow citizens concerning the real significance of laws such, for instance, as the proposed Naturopathic Act, which is commented upon elsewhere.

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Every Member Should Be Alive to His Responsibilities and Do His Part.—With earnest and united coöperation all things are possible. Some of the issues facing the profession are of most serious import and, if not properly met, may wreck havoc with much that has taken years of loyal endeavor to build up. So read again, if you would earnestly assume your share of these duties, the article on page 138 in the August CALIFORNIA AND WESTERN MEDICINE, and resolve then and there to do your part, and after that proceed, with other colleagues, to do it.

EDITORIAL COMMENT*

FETAL TISSUE IMMUNITY

It is a well established fact that the majority of infants under six months of age are statistically immune to measles, diphtheria, scarlet fever and several other infectious diseases. The conventional explanation of this infantile insusceptibility postulates that it is a passive immunity due to transplacental transmission of maternal antibodies plus their postpartum transfer in colostrum or milk. Like so many conventional plausibilities, however, this theory is not without its paradoxes and inconsistencies. Instances are on record of infants demonstrably immune to scarlet fever or diphtheria, whose mothers are demonstrably susceptible to the same infectious agents.¹ New-born serums occasionally neutralize poliomyelitis virus *in vitro*, the corresponding maternal serums being without demonstrable virucidal effects.² Cutaneous tests show that less than 2 per cent of all children under two months of age are skin-reactive to *Staphylococcus aureus* vaccine. Fully 95 per cent of all mothers are susceptible to this toxic antigen.³

To account for such apparent paradoxes recent theorists have postulated the existence of a non-specific "fetal tissue immunity" persisting during the earlier months of extra-uterine life. This theory has been apparently confirmed by laboratory studies. Dr. E. L. Burky⁴ of Johns Hopkins University, for example, tested rabbits of different ages with highly toxic staphylococcus

* This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

1 Dreyfus-Sée, G.: Arch. d. méd. d. enf., 33:16, 1930.

2 Aycock, W. L., and Kramer, S. D.: J. Exper. Med., 52:457, 1930.

3 Kobak, O. J., and Pilot, I.: Proc. Soc. Exper. Biol. and Med., 28:584, 1931.

4 Burky, E. L.: J. Immunol., 24:127, 1933.

filtrates. He found that new-born rabbits are resistant to at least eight times the intravenous adult M. L. D. per kilogram of body weight. This fetal immunity (or insusceptibility) continues till about the fourth month, when the adult susceptibility begins to be demonstrable. Serum from the apparently immune baby rabbits will not passively immunize (or desensitize) adult rabbits.

Under the assumption that fetal pan-immunity is due to a positive chemical factor in rapidly growing tissues, Doctors McKhann and Chu⁵ of Harvard Medical School have sought to isolate this factor for therapeutic study. Aqueous extracts of normal human placentas were separated into albumin and globulin fractions by ordinary fractionation technics. The globulin fraction thus obtained was found to be non-toxic for guinea-pigs and rabbits, and to contain no demonstrable estrus-producing hormone. As little as 0.08 milligram of this globulin neutralized a necrotizing dose of diphtheria toxin as shown by subsequent intradermal guinea-pig tests. The globulin also neutralized poliomyelitis virus *in vitro*. It blanchied scarlet fever rash, in many cases the blanching effect being superior to that obtained in a control test with specific scarlet fever antitoxin.

Their most suggestive therapeutic effects, however, were in measles. Fifteen presumably non-immune children, accidentally exposed to this infection, were given intramuscular injections of human placental globulins within five days after exposure. Fourteen of them developed no signs or symptoms of measles. Three presumably non-immune children, similarly exposed, were each given 30 cubic centimeters adult human blood intramuscularly. All three developed modified measles. Two similarly exposed children, who through faulty histories were believed to be immune, were given no treatment. Both developed typical measles.

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SURGERY OF CHILDHOOD

In the rapid advance of the medical sciences there has been a great tendency toward specialization. Many feel, and probably rightly so, that this has been overdone. However, a high degree of efficiency has been attained in many fields which would not have been otherwise possible. Surgery of infancy and childhood is sufficiently different from adult surgery to warrant special attention. To obtain the best results, the pediatric surgeon must possess a definite understanding of childhood psychology, as well as a knowledge of the diseases of children.

It should be remembered that the surgeon must often approach the sick child in the guise of an enemy. With a shy child, the surgeon should pay little attention to the child at first, but should enter into a general and often irrelevant conver-

sation with the parents or nurse, and finally lead up to the discussion of the patient's difficulty after the child has had an opportunity to "size-up" the surgeon. The child of the extravert type is better approached immediately as the center of attraction. He should be spoken to in a kindly, sympathetic, but manly manner, with an open frankness which will do much to allay any fears and will lead to full coöperation. He should not be told that he will have no pain unless this is true. It is necessary to feel one's way in each individual case, and the type of child must be determined instantly, in order to obtain the proper approach. This is really an art which may be acquired and developed to a high degree, but a thorough understanding of child psychology is also partly inborn. If the surgeon does not have a natural liking for children, he will not be able to gain the child's confidence as readily, or as often, as the surgeon who is especially fond of children. The little patient is usually an excellent reader of the inherent kindness on the part of the surgeon. Spoiled children can best be dealt with in the absence of their parents, and that the psychological problem here is twofold, is evident.

Some of the clearest, clinical histories available can be obtained from a child after the age of six or seven years. A few children will romance about their illness, but an understanding of child psychology will readily enable one to detect this. Many children will give a direct, simple and correct history. All minute details cannot always be elicited, but many can be filled in from the parents. The action, posture, gait, intensity and tone of the cry, or complaints, as observed by the parents, are important points. Children differ in their ability to tolerate pain and discomfort, just as do adults. The small size of the child, allowing for more correct physical findings, is a compensating factor for any lack of detail in the history. Tact and great gentleness must be exercised at the examination.

If the treatment is going to cause more than slight pain, an anesthetic should be administered. The child should never be told that he will not be hurt and then be taken by surprise. If this occurs, he will never trust the surgeon a second time. With some children, it is possible to set broken bones, open abscesses, etc., with local anesthesia, with full coöperation if they are told, not too far in advance, but just before the procedure is carried out, that they will have a little pain, and an explanation be given as to why it is necessary for them to have the pain. Failing coöperation, a light general anesthesia is preferable, because psychic trauma will do the child more harm than a light anesthetic. The lack of responsibility or worries of a child is a great aid in a smooth convalescence. This care-free attitude should not be marred by the child's apprehension or fear of the surgeon, and hence painful treatments should be avoided.

A child will get desperately sick quicker and die, or recover quicker, than an adult with the same disease. This requires alert, correct thinking on the part of the surgeon, who must be able

⁵ McKhann, C. F., and Chu, F. T.: *J. Infect. Dis.*, 52:268, 1933.